

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002082**Date Inspected:** 25-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 800**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG and Tower**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

**New Tower Shop:**

The QA Inspector randomly observed ZPMC welder Wang Zhong Hua ID Number 053753, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 3F (Vertical Fillet) Position with ZPMC WPS WPS-B-T-4113-2, to weld A709M Gr 345 25 millimeter (mm) thick piece mark p676 to A709M Gr485 75 mm thick piece mark SA13 of 89M Mock Up Diaphragm Assembly at Weld Joint (WJ) MUB-MA21A/J-30. The QA Inspector randomly observed ZPMC CWI Xu Le Feng, monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 165 amps, 23.2 volts with a travel speed of 85 mm per minute. Weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC Heat Straightening Personnel, utilizing hand torches with rosebuds, to perform heat straightening operations per HSR1(T)-304 [p351(S)], HSR1(T)-306 [p32(S)] and HSR1(T)-307 [p58(S)].

**Bay 1 OBG:**

The QA Inspector randomly observed ZPMC welders Xu Guo Yin ID Number 059443, Jiang Ting Guang ID Number 062265, Song Yiu Shu ID Number 059421 and Zhang Shao Hui ID Number 059403, utilizing the SAW

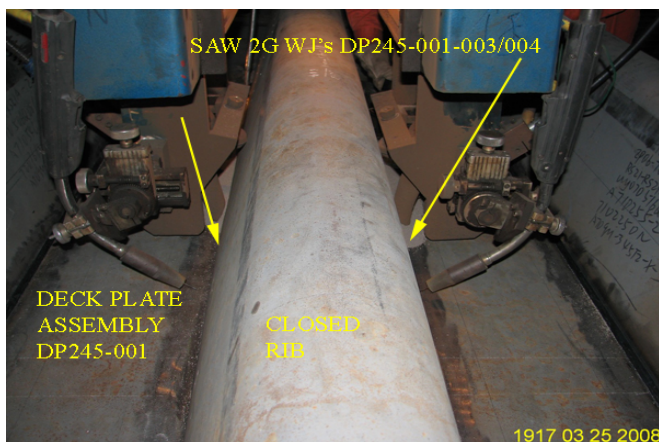
# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

Process in the 2G Position (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2342-U1(Urib)-3 at WJ's DP245-001-003, 004, 007 and 008 on Deck Plate Assembly DP245-001. The QA Inspector randomly observed ZPMC CWI Sun Wei, monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them on a separate spreadsheet developed for monitoring production welding of the closed ribs on Deck Plate Assemblies. Weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welders Xu Guo Yin ID Number 059443, Jiang Ting Guang ID Number 062265, Song Yiu Shu ID Number 059421, Zhang Shao Hui ID Number 059403, Chen Jie ID Number 059468 and Juan Feng Chuan ID Number 059355, utilizing the SAW Process in the 2G Position (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2342-U1(Urib)-3 at WJ's DP050-001-001, 002, 005, 006, 009 on Deck Plate Assembly DP245-001. The QA Inspector randomly observed ZPMC CWI Sun Wei, monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them on a separate spreadsheet developed for monitoring production welding of the closed ribs on Deck Plate Assemblies. Weld parameters appeared to comply with contract requirements.

The QA Inspector recorded Visual Inspection data on a spreadsheet on the welds attaching the closed ribs to Deck Plate Assembly DP055-001 WJ's 001 through 010 and Deck Plate Assembly DP432-001 WJ's 001 through 010.



## Summary of Conversations:

There were no relevant conversations.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

**Inspected By:** Franco,Charlie

Quality Assurance Inspector

**Reviewed By:** Hager,Craig

QA Reviewer